

Claims

1. A method for protecting an entity from the effects of fire caused by an explosion comprising covering at least a part of said entity in a barrier comprising a water gel.
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2. A method as claimed in claim 1 wherein said method involves preventing fires starting in the aftermath of an explosion.
- 10 3. A method as claimed in claim 1 or 2 wherein said water gel comprises water and a gel selected from gelatin, gellan gum gels, poly(γ -benzyl-L-glutamate) (PBLG), agar, collagen, protein gels, polysaccharide gels, keratin gels, hydrogels, ormosils, sol-gels, hydrophilic polymer gels, glycoprotein gels, carrageenans, pectins, alginates, seed gums, egg protein g and Gelacrimide gels or mixtures thereof.
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4. A method as claimed in claim 3 wherein said gel is gelatin.
5. A method as claimed in claim 4 wherein the concentration of gel in water is in the range 5 to 40 wt%.
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6. A method as claimed in claim 5 wherein the concentration of gel in water is in the range 5 to 15 wt%.
- 25 7. A method as claimed in any one of claims 1 to 6 wherein said barrier comprises multiple water gel layers.
8. A method as claimed in claim 7 in which the concentration of gel increases from the outside water gel layer to the inner water gel layer.
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9. A method as claimed in any one of claims 1 to 8 wherein said barrier comprises a water gel layer and a layer of metal, a polymer layer, a fabric layer, a

fibreglass layer, a ceramic layer or dilatant layer or mixtures of such layers.

10. A method as claimed in any one of claims 1 to 9 wherein said entity is a structure, organism or the physical environment.

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11. A method as claimed in claim 10 wherein said structure or organism is a building, vehicle or human.

12. Use of a water gel comprising gelatin and water as a fire retardant.

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13. A method for protecting an entity from the effects of fire comprising covering at least a part of said entity in a barrier comprising a water and gelatin.

14. A fire-retardant material comprising gelatin and water, wherein the concentration of gelatin is at least 3% w/w.

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15. A fire-retardant material as claimed in claim 14 comprising a gelatin and water layer and a layer of metal, a polymer layer, a fabric, a fibreglass layer, a ceramic layer or a dilatant layer or mixtures of such layers.

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16. A fire-retardant material as claimed in claim 15 comprising a gelatin and water layer and a cotton layer.

17. A fire-retardant material as claimed in claim 16 comprising a metal layer.